



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,549	10/24/2003	Henry B. Wheeler	20004/15-US-B	3597
81905	7590	11/12/2009		
Hanley, Flight & Zimmerman, LLC 150 S. Wacker Dr. Suite 2100 Chicago, IL 60606			EXAMINER SAINT CYR, JEAN D	
			ART UNIT 2425	PAPER NUMBER
			NOTIFICATION DATE 11/12/2009	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jflight@hfzlaw.com  
mhanley@hfzlaw.com  
docketing@hfzlaw.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/693,549	<b>Applicant(s)</b> WHEELER ET AL.	
	<b>Examiner</b> JEAN D. SAINT CYR	<b>Art Unit</b> 2425	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### **Double Patenting**

Claim 2 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No.6513161.

Claim 1 of ' 161 recites, ' first signal acquiring means for acquiring a first signal from an output of the recording/playing device; second signal acquiring means for acquiring a second signal from an output of the tuning means; third signal acquiring means for acquiring a third signal from an output of the receiver; fourth signal acquiring means for acquiring the recording indicating signal; and, determining means coupled to the first, second, third, and fourth signal acquiring means for determining an operating mode of the recording/playing device dependent upon the first, second, and third signals and the recording indicating signal...', which read on the claim 2 of the present application, 'disclose a first monitor configured to detect a first signal associated with a tuner configured to tune to a program signal; a second monitor configured to detect a second signal associated with a recording/playing device configured to at least one of record and play a program; a third monitor configured to detect a third signal associated with a receiver coupled to the recording/playing device; a fourth monitor configured to detect a recording signal generated by the recording/playing device during recording of the program to form a recorded program; a mode identifier coupled to the first, second, third, and fourth monitors and configured to identify an operating mode of the recording/playing device based on one or more of the first, second, third, and recording signals'.

Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 1 is obvious variant and encompassed by claim 1 of the application 10693549.

### **Response to Amendment**

This action is in response to applicant's amendment filed on 06/29/2009. Claims 2-47 are still pending in the current application.

### **Response to Arguments**

Applicant's arguments were fully considered, but they were not persuasive. Applicant argues that Kiewit did not disclose determining an operation mode of a recording/playing device based

Art Unit: 2425

on a tuner signal. Also, Applicant argues that Kiewit did not disclose comparing a tuner signal with a signal of the recording/playing device.

However, Kiewit et al clearly disclose by monitoring the aforementioned signals and functions, the system determines whether no viewing is occurring, whether a television broadcast is being viewed, whether a television broadcast is being recorded, whether viewing and recording is occurring simultaneously in col.3, lines 7-12; that means all those determination are done according to signals associated with tuners. Each time the mode changes, a determination is made in order to determine what the new mode is. This is accomplished by determining whether the television is on or off, whether the VCR is on or off, and whether the VCR is in a record or playback mode, col.6, lines 7-17. A channel change can be detected by monitoring the position of the tuner mechanism when mechanical tuners are used, by monitoring tuning voltage in electrically tuned tuners,col.6, lines 40-43; that means monitoring the electrical signal across the tuners allows the system to control the mode operation of the system according to the tuner signal.

Also, Kiewit et al disclose The first condition, designated as mode 4.0, represents television viewing through the tuner of the VCR without recording, col.5, lines 59-61; that means the mode operation is detected according to the tuner signal. A loss of synchronization for an appreciable length of time, longer than that caused by a channel change, indicates fast forward or rewind mode of operation of a VCR or the loss of the video signal e.g. station off the air, col.6, lines 54-58; that means that mode is identified according to a tuner signal.

Finally, Kiewit et al disclose when playback occurs; the played back signatures would be compared with the signatures stored in the home unit data storage. Only if a match occurred would the signatures be sent to the central office and compared with the signatures stored in the central office data base 46 to identify the program. If no match occurred, the signatures would not be sent. This is because whatever is being played back cannot be identified, and may be something like, for example, a home movie. This information proves that the signal of the

recording/playing device was compared with tuner signal in order to determine the mode operation of the system.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 2-16, 18-30, 32-44, 46-47 are rejected under 35 U.S.C. 102(b) as being anticipated by Kiewit et al, US Patent No. 4697209.

Re claim 2, Kiewit et al disclose a first monitor configured to detect a first signal associated with a tuner configured to tune to a program signal(The system 10 receives signals to be identified from a television receiver 12,col.4, lines 30-32);

a second monitor configured to detect a second signal associated with a recording/playing device configured to at least one of record and play a program(see fig.3, modes of viewing and recording that can occur in a typical household, col.4, lines 14-16; Mode 4.1 represents VCR recording and television viewing,col.5, lines 61-62) ;

a third monitor configured to detect a third signal associated with a receiver coupled to the recording/playing device(see fig.1, VCR and TV; system is particularly useful in identifying the playback of prerecorded programs, col.10, lines 49-51; apparatus for identifying previously recorded programs being viewed by a viewer, col.2, lines 40-41) ;

a fourth monitor configured to detect a recording signal generated by the recording/playing device during recording of the program to form a recorded program(see fig.3, mode 3, VCR

Art Unit: 2425

recording; Mode 3 represents recording by the home VCR and occurs when the television receiver is off and the VCR is on, col.5, lines 55-57); and

a mode identifier coupled to the first, second, third, and fourth monitors and configured to identify an operating mode of the recording/playing device based on one or more of the first, second, third, and recording signals(see fig.1, event detector; an events detector 26 which detects predetermined events that occur in the digitized video signal, and causes the signature of the digitized video signal to be extracted by signature extraction circuitry 28 upon the occurrence of a predetermined sequence of events, col.4, lines 59-63).

Re claim 3, Kiewit et al disclose wherein the mode identifier is configured to identify a record mode associated with the recording/playing device in response to detecting that the first signal matches the second signal, and the fourth monitor detecting the recording signal(Mode 3 represents recording by the home VCR and occurs when the television receiver is off and the VCR is on, col.5, lines 55-57, that means the received and the recorded signal are identical; the mode can readily be determined by using a look-up table containing the information in FIG. 3, col.6, line 17-19).

Re claim 4, Kiewit wherein the mode identifier is configured to identify that the recorded program is received by the receiver in response to detecting that the second signal matches the third signal(when playback occurs, the played back signatures would be compared with the signatures stored in the home unit data storage. Only if a match occurred would the signatures be sent to the central office and compared with the signatures stored in the central office data base 46 to identify the program, col.9, lines 8-14).

Re claim 5, Kiewit et al disclose wherein the mode identifier is configured to identify that the recorded program is not received by the receiver in response to detecting that the second signal does not match the third signal(If no match occurred, the signatures would not be sent. This is because whatever is being played back cannot be identified, and may be something like, for example, a home movie, col.9, lines 14-17).

Re claim 6, Kiewit et al disclose wherein the mode identifier is configured to identify at least one of a play mode, a tune mode, a fast forward mode, a rewind mode, an off mode, and a receiver operating mode associated with the recording/playing device in response to the fourth monitor failing to detect the recording signal(see fig.3, VCR and TV off; Mode 1 occurs when both the VCR and television receiver are both off, and indicates that no viewing is taking place, col.5, line 51-53).

Re claim 7, Kiewit et al disclose wherein the mode identifier is configured to identify the play mode in response to detecting that the first signal does not match the second signal, and the second signal matches the third signal(when playback occurs, the played back signatures would be compared with the signatures stored in the home unit data storage. Only if a match occurred would the signatures be sent to the central office and compared with the signatures stored in the central office data base 46 to identify the program, col.9, lines 8-14).

Re claim 8, Kiewit et al disclose wherein the mode identifier is configured to identify at least one of the tune mode, the fast forward mode, and the rewind mode in response to detecting that the first signal matches the second signal, and that the second signal matches the third signal (fast forward and rewind, are designated as Modes 4.3 and 4.4, respectively. Most of these modes can be easily detected by monitoring power line voltage or voltages elsewhere in the television set and the video recorder, col.5, lines 65-67).

Re claim 9, Kiewit et al disclose wherein the tune mode comprises a mode associated with the recording/playing device tuning the receiver (designated as mode 4.0, represents television viewing through the tuner of the VCR without recording, col.5, lines 60-61).

Re claim 10, Kiewit et al disclose wherein the mode identifier is configured to identify at least one of the off mode and the receiver operating mode in response to detecting that the first signal does not match the second signal, and the second signal does not match the third signal (If no match occurred, the signatures would not be sent. This is because whatever is being played

Art Unit: 2425

back cannot be identified, and may be something like, for example, a home movie, col.9, lines 14-17).

Re claim 11, Kiewit et al disclose wherein at least one of the first, second, and third signals comprises at least one of a video signature and an audio signature(the program being viewed is identified by extracting a characteristic signature from the video signal, col.3, lines 14-16).

Re claim 12, Kiewit et al disclose wherein the mode identifier comprises an extractor configured to extract signatures associated with the first, second, and third signals (see fig.1, signature extraction; extracts program identifying signatures from the program material and compares the extracted signatures with reference signatures in pairs to provide more accurate identification, col.2, lines 52-56).

Re claim 13, Kiewit et al disclose wherein the mode identifier comprises a correlator configured to correlate the signatures (the correlation coefficient between the first home unit signature and the selected reference unit signatures are computed, col.8, lines 29-31).

Re claim 14, Kiewit et al explicitly disclose wherein at least one of the second, third, and fourth monitors comprises a non-invasive sensor (placing a light sensitive photoelectric device 36 ,FIG. 1, in proximity with the cathode ray tube, preferably in one corner thereof, col.10, lines 27-30).

Re claim 15, Kiewit et al disclose wherein the non- invasive sensor comprises at least one of a microphone, a photo-detector, and an inductive pickup (see fig.1, element 36, photoelectric device 36).

Re claim 16, Kiewit et al disclose wherein the first monitor is integrated with at least one of the second, third, and fourth monitors (see fig.1, element 26, event detector).

Re claim 18, Kiewit et al disclose wherein the recording/playing device comprises at least one of a video cassette recorder/player; a compact disc recorder/player, a digital video disc recorder/player, and an audio cassette recorder/player (see fig.1, VCR).

Re claim 19, Kiewit et al disclose wherein the receiver comprises at least one of a television receiver and a radio receiver (see fig.1, element 12, television receiver).

Re claims 20, 34, are met as previously discussed with respect to claim 2.

Re claims 21, 35, are met as previously discussed with respect to claim 3.

Re claims 22, 36, are met as previously discussed with respect to claim 4.

Re claims 23, 37, are met as previously discussed with respect to claim 5.

Re claims 24, 38, 42, are met as previously discussed with respect to claim 6.

Re claim 25, is met as previously discussed with respect to claim 7.

Re claims 26, 40, are met as previously discussed with respect to claim 8.

Re claims 27, 41, are met as previously discussed with respect to claim 9.

Re claims 28, 39, are met as previously discussed with respect to claim 10.

Re claim 29, is met as previously discussed with respect to claim 12.

Re claim 30, is met as previously discussed with respect to claim 11.

Re claim 32, is met as previously discussed with respect to claim 18.

Re claim 33, is met as previously discussed with respect to claim 19.

Re claim 43, is met as previously discussed with respect to claims 12 and 13.

Re claim 44, Kiewit et al disclose wherein at least one of the first, second, and third signals, and the recording signal comprises at least one of a video signature, an audio signature, and a non-invasive signal(the program being viewed is identified by extracting a characteristic signature from the video signal, col.3, lines 14-16).

Re claim 46, Kiewit et al disclose wherein the recording/playing device comprises at least one of a video cassette recorder/player; a compact disc recorder/player, a digital video disc recorder/player, and an audio cassette recorder/player (see fig.1, VCR).

Re claim 47, Kiewit et al disclose wherein the receiver comprises at least one of a television receiver and a radio receiver (see fig.1, element 12, television receiver).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17,31 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kiewit et al in view of Vitt et al, US No. 5165069.

Re claim 17, Kiewit et al did not explicitly disclose wherein the recording signal comprises an erase head signal.

However, Vitt et al disclose wherein the recording signal comprises an erase head signal(a sensor 32 detects a radiated erase head signal of the VCR 21, col.3, lines 39-40).

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to incorporate the teaching of Vitt into the invention of Kiewit for the purpose of allowing the sensor to detect the operation mode of the VCR according to signal received from the erase head signal.

Re claims 31, 45, are met as previously discussed with respect to claim 17.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean Duclos Saintcyr whose phone number is 571-270-3224. The examiner can normally be reached on M-F 7:30-5:00 PM EST. If attempts to reach the examiner by telephone are not successful, his supervisor, Brian Pendleton, can be reached on 571-272-7527. The fax number for the organization where the application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Retrieval (PAIR) system. Status information for published applications may be obtained from either private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, dial 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jean Duclos Saintcyr /

Application/Control Number: 10/693,549  
Art Unit: 2425

Page 11

/Brian T. Pendleton/

Supervisory Patent Examiner, Art Unit 2425